

REMARKS

Claims 1-16 are pending. Claims 5-9 are allowed, claims 1-3, 10, 11, 14, and 16 are rejected, and claims 4, 12, and 13 are objected to. Claims 1 and 12 are hereby amended without prejudice. Claim 17 is added. Applicant submits that the amendments introduce no new matter. Support for the amendments can be found throughout the application as originally-filed and in the drawings (see, e.g. claim 1 and page 68, lines 3-23).

Applicant makes these claim amendments and cancellations without prejudice. Also, applicant disagrees with all rejections and makes these claim changes only to expedite prosecution and move to allowance as soon as possible.

1. Claim Objections

Claim 12 is objected to, and the Office requests amendment for clarification. Applicants have amended claim 12 as suggested by the Office. Reconsideration and withdrawal of the objection is respectfully requested.

2. 35 U.S.C. §102 Rejections

Claims 10 and 16 are rejected under 35 U.S.C. §102(b) over Sugimoto et al (US 5,565,899).

In claim 10, Applicants recite an image forming apparatus comprising an ink storage section for storing ink, an ink supplying path for supplying, to a print head, the ink stored in the ink storage section, an electrode for detecting whether the ink is present or absent in the ink supplying path, and first and second filters in the ink supplying path. The first filter is located upstream to the second filter, and the second filter has a larger filtration accuracy than the first filter.

Sugimoto et al describes an ink jet apparatus having an ink supply passage 1600a, and a first and second filter 700a, 700.

Sugimoto et al at least fails to teach or suggest that the second filter 700 has a larger filtration accuracy than the first filter 700a. Thus, Sugimoto et al does not expressly teach each and every element of claim 10. Further, Sugimoto et al does not inherently teach that the second filter 700 has a larger filtration accuracy than the first filter 700a. Sugimoto does not teach or suggest any relationship between the filtration accuracies of the first and second filter. Thus, a second filter having a larger filtration accuracy than the first filter would not necessarily flow from Sugimoto et al as required for a reliance upon the theory of inherency. See *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

Accordingly, claim 10 is patentable over Sugimoto et al. Claim 16 depends from claim 10 and, likewise, is patentable over Sugimoto et al.

3. 35 U.S.C. §103 Rejections

Claims 1-3 and 13-14 are rejected under 35 U.S.C. §103(a) over Sugimoto et al (US 5,565,899) in view of Nagasaki et al (US 6,036,305).

Claims 1-3

In claim 1, applicants recite an image forming apparatus, comprising an ink storage section for storing ink, an ink supplying path for supplying, to a print head, the ink stored in the ink storage section, and an electrode for detecting whether the ink is present or absent in the ink supplying path. The amount of the ink supplied into the ink supplying path per minute is such that a predetermined S/N ratio of a detection signal produced by the electrode is satisfied.

Sugimoto et al at least fails to teach or suggest that the amount of ink supplied into the ink supplying path per minute is such that a predetermined S/N ratio of a detection signal produced by the electrode is satisfied. Rather, Sugimoto merely describes an apparatus wherein the supply of ink through the filter is such that the discharge rate of the sucking means does not exceed the flow rate of the ink.

Nagasaki et al does not remedy this deficiency. Like Sugimoto et al, Nagasaki is silent with respect to the supply of ink from the ink storage section to the ink supplying path.

Claims 13-14

Applicants respectfully submit that claim 10, from which claims 13 and 14 depend, is patentable over Sugimoto et al for the reasons set forth above. Sugimoto et al at least fails to teach or suggest that the second filter 700 has a larger filtration accuracy than the first filter 700a. Nagasaki et al does not remedy this deficiency. Nagasaki et al describes a device having a single filter.

Further, as set forth above, Sugimoto et al and Nagasaki et al both fail to teach or suggest that the amount of ink supplied into the ink supplying path is 1.0cc or less per minute as set out in claim 13.

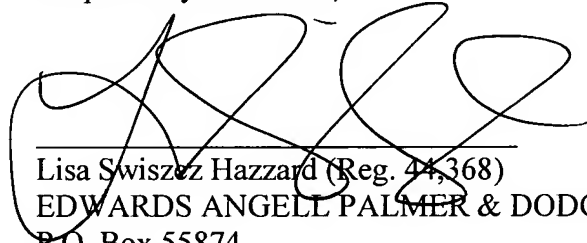
For at least these reasons, claims 13 and 14 are patentable over Sugimoto et al and Nagasaki et al.

CONCLUSION

It is believed the application is in condition for immediate allowance, which action is earnestly solicited. Should the Examiner wish to discuss any of the amendments and/or remarks made herein, the undersigned attorney would appreciate the opportunity to do so.

If for any reason a fee paid is inadequate or credit is owed for any excess fee paid, you are hereby authorized and requested to charge or credit Deposit Account No. 04-1105 under order no. 60710 (70904).

Respectfully submitted,

A large, stylized handwritten signature in black ink, appearing to read 'LSH', is written over a horizontal line.

Lisa Swiszez Hazzard (Reg. 44,368)
EDWARDS ANGELL PALMER & DODGE, LLP
P.O. Box 55874
Boston, MA 02205
(617) 439-4444

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